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EXAMINER

PEACHES, RANDY

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,569

Applicant(s)

WANG ET AL.

Examiner

Randy Peaches

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-16, 19 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. ***Claims 1-12, 14-16, 19 and 22-23*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) in view of Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) in further view of Watkins (U.S. Patent Number 6,357,726 B1).

Regarding ***claim 1***, Hutchison discloses a portable communication device (PCD), which reads on claimed "information processing apparatus," comprising:

- a casing (2)(see paragraph [0042]), which reads on claimed "housing,"
- a processing module (30) installed in the said casing (2) for controlling the said PCD. See [0054];
- a soft keys (8,9), which reads on claimed "input module," installed in the said casing and electrically connected to the processing module (30) for receiving input signals to generate corresponding control signals and for transmitting the corresponding control signals to the processing module (30);

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- a display device (4) installed in the said casing (2) and electrically connected to the processing module (30) for transforming information transmitted from the processing module into video data and for displaying the video data;

However, Hutchison et al fails to disclose wherein a scent control circuit is a part of the architecture of the said PCD.

Chaio et al discloses:

- a scent controller, which reads on claimed "scent control circuit," installed in the housing and electrically connected to the micro-controller (034), which reads on claimed "processing module," for generating a scent control signal. See paragraph [0096]; and
- a scent or flavor-releasing module (004), which reads on claimed "scent releasing module," installed in the housing and electrically connected to the said scent controller for releasing scent particles according to the scent control signal, such that a user can smell scent corresponding to the scent particles. See paragraph [0096-0098].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) to include Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

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However, the combination of Hutchison et al and Chaio et al. fails to clearly disclose wherein the processing module is capable of transmitting the scent module information to the wireless communication module, and the wireless communication module then wirelessly transmitting the scent module information to other wireless communication devices.

Watkins teaches in column 3 lines 3-8 and column 5 lines 10-22, lines 60-66 wherein a control signal is transmitted via wirelessly, containing scent information to other scentgenerating devices. See Watkins column 5 lines 26-50.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) in order to provide and additional means to transmit a controls signal via wirelessly to a said unit which receives the said scent information contained within the signal and thus release the respected aroma.

Regarding **claim 2**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 1**, is further discussed by Chaio et al. wherein the said scent or flavor releasing module (004) comprises:

- an electrically insulated housing (005) or disk, which reads on claimed "scent storage media," for storing the scent particles. See paragraph [0098]; and
- a corona discharge needle (008), which reads on claimed "scent releaser," connected to the said electrically insulated housing (005) or disk for releasing the scent particles stored in the said electrically insulated housing (005) or disk according to the scent control signal. See paragraph (0098).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the combined teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 3**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 2**, is further discussed by Chaio et al. wherein the scent storage media is liquid scent storage media. See paragraph [0098].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 4**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 2**, is further discussed by Chaio et al. wherein the scent card, which reads on claimed "scent storage media," is solid scent storage media. See FIGURE 1.

Regarding **claim 5**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 2**, is further discussed by Chaio et al. wherein the said corona discharge needle (008) releases the scent particles stored in the electrically insulated housing (005) or disk by heating electrically insulated housing (005) or disk. See paragraphs [0011, 0102].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 6**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 2**, is further discussed by Chaio et al. wherein the scent releaser releases the scent particles stored in the scent storage media by vibrating the scent storage media with ultrasonic waves using a piezoelectric discharge (035). See paragraph [0102 and 0032].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 7**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 2**, is further discussed by Chaio et al. wherein the scent storage media is accommodated within a cartridge or disk (047). See paragraph [0099].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 8**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 7**, is further discussed by Chaio et al. wherein the scent releaser is fixed inside the housing and the cartridge is detachably connected to the scent releaser. See FIGURE 25.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent

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Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 9**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 7**, is further discussed by Chaio et al. wherein the cassette is capable of accommodating a plurality of scent storage media, each scent storage media storing particles of different scent. See paragraph [0030].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 10**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are

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made, the combination according to **claim 1**, is further discussed by Chaio et al. wherein the scent releasing module is detachably installed in the housing. See paragraph [0023].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 11**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 1**, as taught by Hutchinson, further comprises a transmitter/receiver circuit (36), which reads on claimed "wireless communication module," electrically connected to the processing module for receiving wireless signals so as to generate corresponding communication signals and for transmitting the communication signals to the processing module. See FIGURE 3.

Regarding **claim 12**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication

Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 11**, is further discussed by Chaio et al. wherein the said micro-controller is capable of controlling the scent control circuit according to the communication signals so as to enable the scent control circuit to generate scent control signals corresponding to the communication signals. Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 14**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 13**, is further discussed by Hutchinson, wherein a microphone (28) is electrically connected to the processing module for transforming voice waves into sound signals and for transmitting the sound signals to the processing module, and the processing module being capable of controlling the wireless communication module to wirelessly transmit the sound signals to other wireless communication devices. See paragraph [0052].

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Regarding **claim 15**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 11**, is further discussed by Hutchinson, wherein a speaker is electrically connected to the processing module for transforming information transmitted from the processing module into voice waves. See paragraph [0052] and FIGURE 3.

Regarding **claim 16**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 15**, is further discussed by Hutchinson, wherein a processing module is capable of controlling the speaker to transform the communication signals into corresponding voice waves according to the communication signals. See paragraph [0052] and FIGURE 3.

Regarding **claim 19**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 1**, is further discussed by Chaio et al. in paragraphs [0089 and 0091], wherein a scent releasing module further comprising a scent storage media for storing the scent

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particles, and the scent module information is used for recording type information of the scent particles.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 22** as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 1**, is further discussed by Chaio et al. in paragraph [0116], wherein the memory stores data in a non-volatile way.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1) and Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) to further include Watkins (U.S. Patent Number 6,357,726 B1) to provide the user of a said PCD the ability to use the sense of smell in order to enhance the communication experience between two parties.

Regarding **claim 23**, as the combination of over Hutchison et al (U.S. Patent

Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 1**, is further discussed by Hutchinson, wherein being a said PCD, which reads on claimed "mobile phone."

2. **Claims 24 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) to further include Kim et al (U.S. Patent Publication Number 2003/0087666 A1).

Regarding **claims 24 and 25**, as the combination of over Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) are made, the combination according to **claim 1**, the combination fails to disclose wherein the said PCD is a computer and a notebook computer.

Kim et al. discloses in paragraph [0005], wherein the portable computer can be a computer and/or notebook computer.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Hutchison et al (U.S. Patent Publication Number 2004/0102210 A1), Chaio et al. (U.S. Patent Publication Number 2002/0114744 A1) and Watkins (U.S. Patent Number 6,357,726 B1) to further include Kim et al (U.S. Patent Publication

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Number 2003/0087666 A1) to provide the user a variety of communication mediums to incorporate a scent interactive device to enhance the communication experience of the user.

Response to Arguments

Applicant's arguments with respect to ***claim 1-25*** have been considered but are moot in view of the new ground(s) of rejection.

Regarding ***claims 1-25***, after further consideration of the originally objected ***claim 21***, the Examiner reconsidered the claimed language in view of the newly cited prior art. Therefore, based on the information present in the above Office Action, ***claims 1-25*** stands rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (571) 272-7914. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Randy Peaches
June 13, 2005



**CHARLES APPIAH
PRIMARY EXAMINER**